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Remarks:

Amendments to the claims:

Claims 1 and 4-7 are pending in this application. By this Amendment, claims 1 and 4-7 are amended, and claims 2, 3 and 8 are canceled. Claim 3 is canceled because the subject matter therein was directed to nonelected species. Claims 1 and 4-7 are amended and claim 2 is canceled to address the rejection under 35 USC 101. Claim 8 is canceled to address the rejection under 35 USC 112, first paragraph.

No new matter is added to the application by this Amendment. Support for the features added to claim 1 can be found in the specification, as originally filed, at, for example, page 3, lines 4 and 5 and canceled claims 2 and 8, as originally filed.

Regarding the rejections of claims 1, 2 and 4-7 under 35 USC 101:

The Patent Office alleges that claims 1, 2 and 4-7 are directed to non-statutory subject matter because "use" claims are non-statutory. Additionally, the Patent Office alleges that it is unclear if claims 4-7 are compositions of claim 1 or methods. Applicants traverse this rejection.

In view of the cancellation of claim 2, this rejection is moot with respect to that claim.

Claim 1 is amended to be directed to a method of repelling cockroaches, and claims 4-7 are amended to be directed to a composition for repelling cockroaches. In light of the amendments to claims 1 and 4-7, Applicants submit that the rejections under 35 USC 101 are overcome.

Applicants respectfully request withdrawal of these rejections to the claims.

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Regarding the rejection of claim 8 under 35 USC 112, first paragraph:

The Patent Office alleges that claim 8 is unsupported under 35 USC 112, first paragraph, because the specification, while being enabling for cockroaches, does not reasonably provide enablement for, any species of insect. Applicants traverse this rejection.

In view of the cancelation of claim 8, this rejection is moot with respect to this claim.

Applicants respectfully request withdrawal of this rejection to the claim.

Regarding the rejection of claim 8 under 35 USC 102(b) as allegedly being anticipated by or, in the alternative, under 35 USC 103(a) as allegedly being unpatentable over DE 1792331 (hereinafter "DE 331"):

Applicants traverse the Examiner's rejection of claim 8 as allegedly being anticipated by or, in the alternative, as allegedly being unpatentable over DE 331.

Prior to discussing the relative merits of the Examiner's rejection, the applicant points out that unpatentability based on "anticipation" type rejection under 35 USC 102(b) requires that the invention is not in fact new. See *Hoover Group, Inc. v. Custom Metalcraft, Inc.*, 66 F.3d 299, 302, 36 USPQ2d 1101, 1103 (Fed. Cir. 1995) ("lack of novelty (often called 'anticipation') requires that the same invention, including each element and limitation of the claims, was known or used by others before it was invented by the patentee").

Anticipation requires that a *single reference* [emphasis added] describe the claimed invention with sufficient precision and detail to establish that the subject matter existed in the prior art. See, *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990).

The principle of "inherency," in the law of anticipation, requires that any information missing from the reference would nonetheless be known to be present in the subject matter of the reference, when viewed by persons experienced in the field of the invention. However, "anticipation by inherent disclosure is appropriate only when the reference

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discloses prior art that must necessarily include the unstated limitation, [or the reference] cannot inherently anticipate the claims." *Transclean Corp. v. Bridgewood Servs., Inc.*, 290 F.3d 1364, 1373 [62 USPQ2d 1865] (Fed. Cir. 2002); *Hitzeman v. Rutter*, 243 F.3d 1345, 1355 [58 USPQ2d 1161] (Fed. Cir. 2001) ("consistent with the law of anticipation, an inherent property must necessarily be present in the invention described by the count, and it must be so recognized by persons of ordinary skill in the art"); *In re Robertson*, 169 F.3d 743, 745 [49 USPQ2d 1949] (Fed. Cir. 1999) (that a feature in the prior art reference "could" operate as claimed does not establish inherency).

Thus when a claim limitation is not explicitly set forth in a reference, evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co.*, 948 F.2d at 1268. It is not sufficient if a material element or limitation is "merely probably or possibly present" in the prior art. *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295 [63 USPQ2d 1597] (Fed. Cir. 2002). See also, *W.L. Gore v. Garlock, Inc.*, 721 F.2d at 1554 (Fed. Cir. 1983) (anticipation "cannot be predicated on mere conjecture respecting the characteristics of products that might result from the practice of processes disclosed in references"); *In re Oelrich*, 666 F.2d 578, 581 [212 USPQ 323] (CCPA 1982) (to anticipate, the asserted inherent function must be present in the prior art).

The undersigned also reminds the Patent Office that the determination of obviousness under § 103(a) requires consideration of the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1 [148 USPQ 459] (1966): (1) the scope and content of the prior art; (2) the differences between the claims and the prior art; (3) the level of ordinary skill in the pertinent art; and (4) secondary considerations, if any, of nonobviousness. *McNeil-PPC, Inc. v. L. Perrigo Co.*, 337 F.3d 1362, 1368, 67 USPQ2d 1649, 1653 (Fed. Cir. 2003). See also *KSR International Co. v. Teleflex Inc.*, 82 USPQ2D 1385 (U.S. 2007).

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A methodology for the analysis of obviousness was set out in *In re Kotzab*, 217 F.3d 1365, 1369-70, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000) A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher."

It must also be shown that one having ordinary skill in the art would reasonably have expected any proposed changes to a prior art reference would have been successful. *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1207, 18 USPQ2d 1016, 1022 (Fed. Cir. 1991); *In re O'Farrell*, 853 F.2d 894, 903-04, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988); *In re Clinton*, 527 F.2d 1226, 1228, 188 USPQ 365, 367 (CCPA 1976). "Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure." *In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988).

The Patent Office alleges that DE 331 teaches or suggests each and every feature of claim 8. Specifically, the Patent Office alleges that the Abstract of DE 331 teaches that the instant compound is synergistic with an insecticide, otherwise not shown as lethal, but is applied to a substance- filter paper. The Patent Office also alleges that since the compound claimed is applied as claimed, it would inherently repel any insects as would the instant invention. Applicants respectfully disagree with these allegations.

In view of the cancellation of claim 8, this rejection is moot. However, the features of canceled claim 8 are incorporated into amended claim 1. Additionally, the features of canceled claim 2 are included in claim 1. Applicants submit that the Patent Office's failure to reject claim 2 as allegedly being anticipated by or, in the alternative, allegedly

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being unpatentable over DE 331 is evidence that the Patent Office acknowledges that the features of canceled claim 2 are not taught or suggested by DE 331. Thus, the features recited in amended claim 1 are also not taught or suggested by DE 331.

DE 331 teaches that it has been found that the action of insecticidal 1-naphthyl-N-methylcarbamate is synergistically enhanced by the addition of a non-insecticidal carbamate (see the first full paragraph on page 1 of DE 331). However, DE 331 fails to disclose menthane compounds including a molecule having a menthyl structure. At best, DE 331 teaches the following four insecticidal carbamates: 3-Methyl-5-isopropylphenyl-N-methylcarbamate; 1-Naphthyl-N-methylcarbamate; 3-Isopropylphenyl-N-methylcarbamate; and 5-(1-Isopropyl-3-methylpyrazolyl)-N,N-dimethylcarbamate (see the paragraph bridging pages 1 and 2 of DE 331). None of these four insecticidal carbamates are menthyl carbamates. Moreover, none of the non-insecticidal carbamates listed on pages 4 and 5 of DE 331 include a menthyl carbamate. Thus, DE 331 fails to teach or suggest a menthyl carbamate as required by the present claims.

Because the features of independent claim 1 are neither taught nor suggested by DE 331, DE 331 cannot anticipate, and would not have rendered obvious, the features specifically defined in amended claim 1.

For at least these reasons, claims 1 and 4-7 are patentably distinct from and/or non-obvious in view of DE 331. Reconsideration and withdrawal of the rejection of the claims under 35 U.S.C. 102(b)/103(a) are respectfully requested.

Regarding the rejection of claim 8 under 35 USC 103(a) as allegedly being unpatentable over U.S. Patent No. 6,150,415 to Hammock et al. (hereinafter "Hammock") in view of WO 02/15692 (hereinafter "WO 692"):

Applicants traverse the Examiner's rejection of claim 8 as allegedly being unpatentable over Hammock in view of WO 692.

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The Patent Office alleges that the combination of Hammock and WO 692 teaches or suggests each and every feature of claim 8. The Patent Office also alleges that it would have been obvious to the artisan to utilize an analog of the known repellents of WO 692, in order to provide synergistic effects and extend the range of species affected as shown with the instant compound of Hammock. Further, the Patent Office alleges that it would have been obvious to a person of ordinary skill in the art at the time the invention was made desiring to utilize pest control means, to use any of art recognized means, as of Hammock modified as desired to increase stability, compatability of ingredients, increased toxicity. Moreover, the Patent Office alleges that minor testing with the Hammock compound of increased potency would be expected to be successful when incorporating the known analogous repellent of WO 692. Applicants respectfully disagree with these allegations.

In view of the cancelation of claim 8, this rejection is moot. As discussed above, the features of canceled claims 2 and 8 are incorporated into amended claim 1. Applicants submit that the Patent Office's failure to reject claim 2 as being allegedly being unpatentable over Hammock in view of WO 692 is evidence that the Patent Office acknowledges that the features of canceled claim 2 are not taught or suggest by Hammock and WO 692, taken singly or in combination. Thus, the features recited in amended claim 1 are also not taught or suggested by Hammock and WO 692, taken singly or in combination.

Hammock teaches a method of treating an epoxide hydrolase is provided that is useful to purify, isolate, or inhibit the target epoxide hydrolase by complexing with a free form or immobilized compound so that the activity of the complexed epoxide hydrolase is modified with respect to enzymatically active, uncomplexed epoxide hydrolase (see col. 2, line 64 – col. 3, line 3 of Hammock).

The Patent Office alleges "Hammock shows the instant compounds (column 16-225) as enzyme inhibitors of increased potency (column 17, lines 41, 41) as useful synergist with

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insecticides (column 19, top) would permit insect control" (see page 4 of the present Office Action). Contrary to the Patent Office's allegations, col. 17, lines 41 and 42 of Hammock disclose "Compound 225 illustrates that chiral compounds can be used to increase potency and selectivity." Nowhere does Hammock teach or suggest that use compound 225 has increased potency. At best, this passage of Hammock teaches that compound 225 is potent.

Additionally, the paragraph bridging columns 18 and 19 and cited by the Patent Office discloses:

Juvenile hormone regulates development of immature insects, the vitellogenin production and uptake into oocytes in reproductive female insects, and diapause in adult insects. Mullin, J. of Chem. Ecol., 14, pp. 1867-1888 (1988) reviewed a variety of epoxide hydrolases then known to metabolize plant allelo chemicals, antifeedents, and essential hormones or precursors for herbivorous arthropods. We contemplate application of the inhibitors herein described together with insecticides that would otherwise be degraded by insectan epoxide hydrolases. The administration of inhibitors so as to cause inhibition of juvenile hormone epoxide hydrolase, for example, in accordance with this invention can disrupt various crucial insect processes. Yet more broadly, action of insecticides degraded by general insectan epoxide hydrolases would benefit if these hydrolases were inhibited so as to enhance the efficacy of the insecticides. One example of such an epoxide containing insecticide is the cyclodiene HEOM. Another agricultural chemical is the epoxide glutathione transferase inhibitor tridiphane. Epoxide hydrolase inhibitors will improve the stability of antifeedents in pest organisms. Table 6 illustrates inhibition data for several inhibitors of this invention. Analogous applications can be made with nematodes and other agricultural, medical, and veterinary pests. (see col. 18, line 66 – col. 19, line 22 of Hammock).

Thus, nowhere does Hammock teach or suggest synergy from use of compound 225 with insecticides as alleged by the Patent Office.

As set forth above, Hammock teaches "[T]he administration of inhibitors so as to cause inhibition of juvenile hormone epoxide hydrolase, for example, in accordance with this invention can disrupt various crucial insect processes" and "[Y]et more broadly, action of

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insecticides degraded by general insectan epoxide hydrolases would benefit if these hydrolases were inhibited so as to enhance the efficacy of the insecticides" (see col. 19, lines 8-15 of Hammock). In other words, Hammock teaches insect control because (1) inhibitors may disrupt various crucial insect processes of juvenile insects and (2) insecticides are more effective by stopping the enzymes from degrading the insecticides. However, Hammock teaches that the latter is merely an additive effect, but does not teach synergy in the latter. Hammock, at best, teaches that the inhibitor blocks the enzyme so that the insecticide is unaffected by the enzyme and that the insecticide may perform normal functions.

The two methods of insect control according to Hammock, as discussed above, are not equivalent to and do not teach or suggest repelling insects which means dissuading insects from infesting a location. Instead, Hammock teaches insect control by having insects infest a location where inhibitors are present and consume the inhibitors to disrupt their metabolism. The methods of insect control according to Hammock are total different methods than repelling insects. Additionally, insect control by repelling insects is not inherent to the methods of insect control of Hammock because Hammock desires the insects to infest a location where the inhibitors are present and subsequently consume the inhibitors.

Hammock does not teach or suggest that compound 225 is a repellent. Instead, Hammock teaches use of compound 225 as an enzyme blocker. Hammock clearly does not teach or suggest repellents or repelling insects as required by the present claims. Moreover, one of ordinary skill in the art would not turn to the insect control methods of Hammock to repel insects with repellents as alleged by the Patent Office.

Neither Hammock nor WO 692, taken singly or in combination, teaches or suggests the method of repelling cockroaches as specifically defined in amended claim 1.

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Because these features of independent claim 1 are not taught or suggested by Hammock and WO 692, taken singly or in combination, these references would not have rendered the features of claims 1 and 4-7 obvious to one of ordinary skill in the art.

In view of the foregoing, reconsideration and withdrawal of this rejection are respectfully requested.

Should the Examiner in charge of this application believe that telephonic communication with the undersigned would meaningfully advance the prosecution of this application, they are invited to call the undersigned at their earliest convenience. The early issuance of a *Notice of Allowability* is solicited.

PETITION FOR A ONE-MONTH EXTENSION OF TIME

The applicants respectfully petition for a one-month extension of time in order to permit for the timely entry of this response. The Commissioner is hereby authorized to charge the fee to Deposit Account No. 14-1263 with respect to this petition.

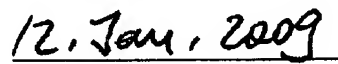
CONDITIONAL AUTHORIZATION FOR FEES

Should any further fee be required by the Commissioner in order to permit the timely entry of this paper, including any extension of time fees, the Commissioner is authorized to charge any such fee to Deposit Account No. 14-1263.

Respectfully Submitted;



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Allyson Ross
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Jan 12, 2009
Date